

WHAT IS CLAIMED IS:

1           1. A plasma display panel, wherein a phosphor constituting  
2 a fluorescent layer of said plasma display panel is made of  
3 mono-crystal particles, said mono-crystal particles each having  
4 a diameter of 10-200 nanometers.

1           2. The plasma display panel according to claim 1, wherein  
2 a reflection layer for reflecting a light emitted from said  
3 phosphor is provided below said fluorescent layer.

1           3. The plasma display panel according to claim 2, wherein  
2 said reflection layer is made of white pigment powder.

1           4. The plasma display panel according to claim 2, wherein  
2 between said fluorescent layer and said reflection layer is  
3 provided a color filter layer for selectively transmitting only  
4 a predetermined-wavelength visible light.

1           5. The plasma display panel according to claim 4, wherein  
2 said color filter layer is made of an inorganic pigment.

1           6. The plasma display panel according to claim 1, wherein  
2 said fluorescent layer has a film thickness of 0.05-1.0  
3 micrometers.

1           7. The plasma display panel according to claim 2, wherein  
2 said reflection layer has a film thickness of 1-20  $\mu\text{m}$ .

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1           8. The plasma display panel according to claims 4, wherein  
2   said inorganic pigment used to form said color filter layer has  
3   an average particle diameter of 10-200 nanometers.

1           9. The plasma display panel according to claim 4, wherein  
2   said color filter layer has a film thickness of 10-200 nanometers.

1           10. A plasma display panel in which a rear-side glass  
2   substrate provided with a data electrode covered by a white  
3   dielectric and a front-side glass substrate provided with a  
4   transparent electrode and a trace electrode covered by a  
5   protection layer and a transparent dielectric are both sealed by  
6   a sealing material, in which a discharge cell separated by a  
7   partition is formed, in which on said white dielectric and said  
8   partition is formed a fluorescent layer made of a fluorescent  
9   material, wherein a fluorescent layer is formed in such a manner  
10   as to cover said protection layer of said front-side glass  
11   substrate, said fluorescent material of said fluorescent layer  
12   being made of mono-crystal particles having a particle diameter  
13   of 10-200 nanometers.

1           11. The plasma display panel according to claim 10, wherein  
2   said fluorescent layer has a film thickness of 0.05-0.5  
3   nanometers.

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